



# Amphibious Warfare Program



## PMS377 Program Update Surface Navy Association 13 January 2016

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**DISTRIBUTION STATEMENT A**

Approved for public release; distribution is unlimited.

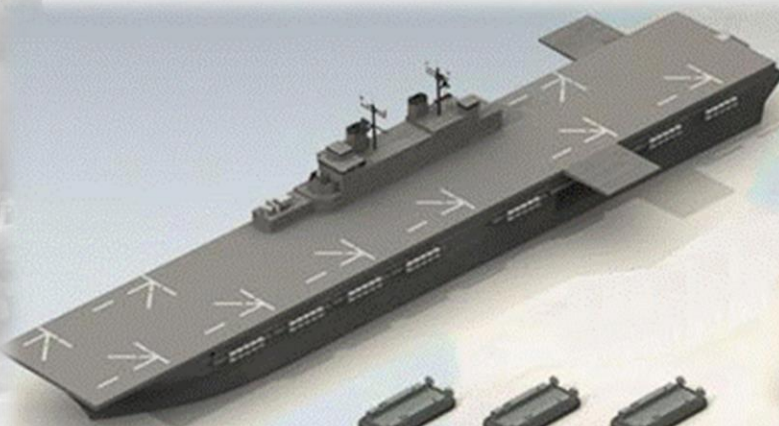
# Amphibious Ready Group

11

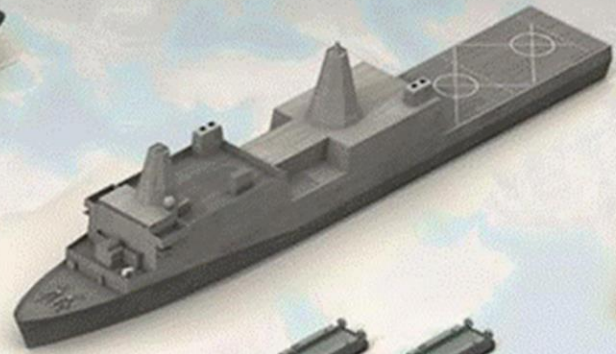
LHD  
**LHA**

LPD

LSD  
LX(R)



LCAC



LCAC



LCU

72

**LCAC**  
**SSC**

32

**LCU 1610**  
**LCU 1700**



# Programs

LHA 8



LHA 7  
(TRIPOLI)



USS AMERICA  
(LHA 6)



OJ-731C/KSQ  
Computer Workstation



AADS

acquisition responsibilities

*Pre-Systems Acquisition*

*Systems Acquisition*

*Sustainment*

Surface  
Connector (X)  
Recapitalization



LCU  
1700

SSC



LCAC /  
LCAC SLEP



LCU



acquisition and lifecycle responsibilities





# Big Deck Evolution

**LHD 8**

**2009**



**LHA(R) FLT 0  
(LHA 6/7)**

**2014/2018**



**LHA(R) FLT 1  
(LHA 8)**

**2024 (PLANNED)**



**All Hybrid Propulsion  
(Gas Turbine or Electric)**



# LHA(R)



# LHA(R) Flt 0 vs. Flt 1

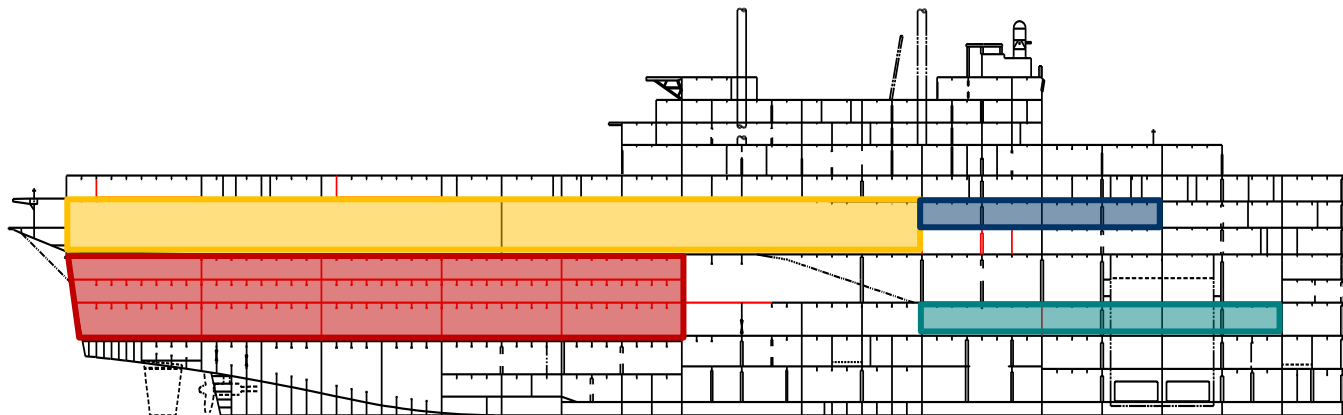
Hangar  
Enhancements

Aviation Shops  
and Storerooms

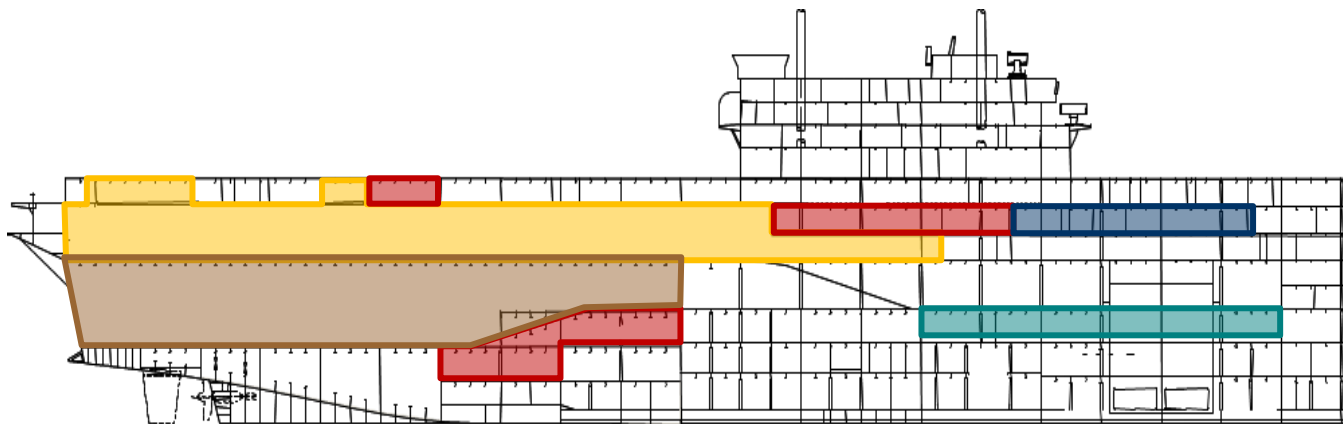
Medical  
Resized

Shops

2 LCAC/SSC  
Well Deck



Flight  
0



Flight  
1





# LHA 7 Production Status



**40%  
Complete**





# LHA(R) Flight 1



**2-LCAC/SSC Well deck and reduced island**



# LHA(R) / JSF Integration



## Cornerstone Alterations

- Power
- Maintenance/Logistics
- Weapons & Missions Support

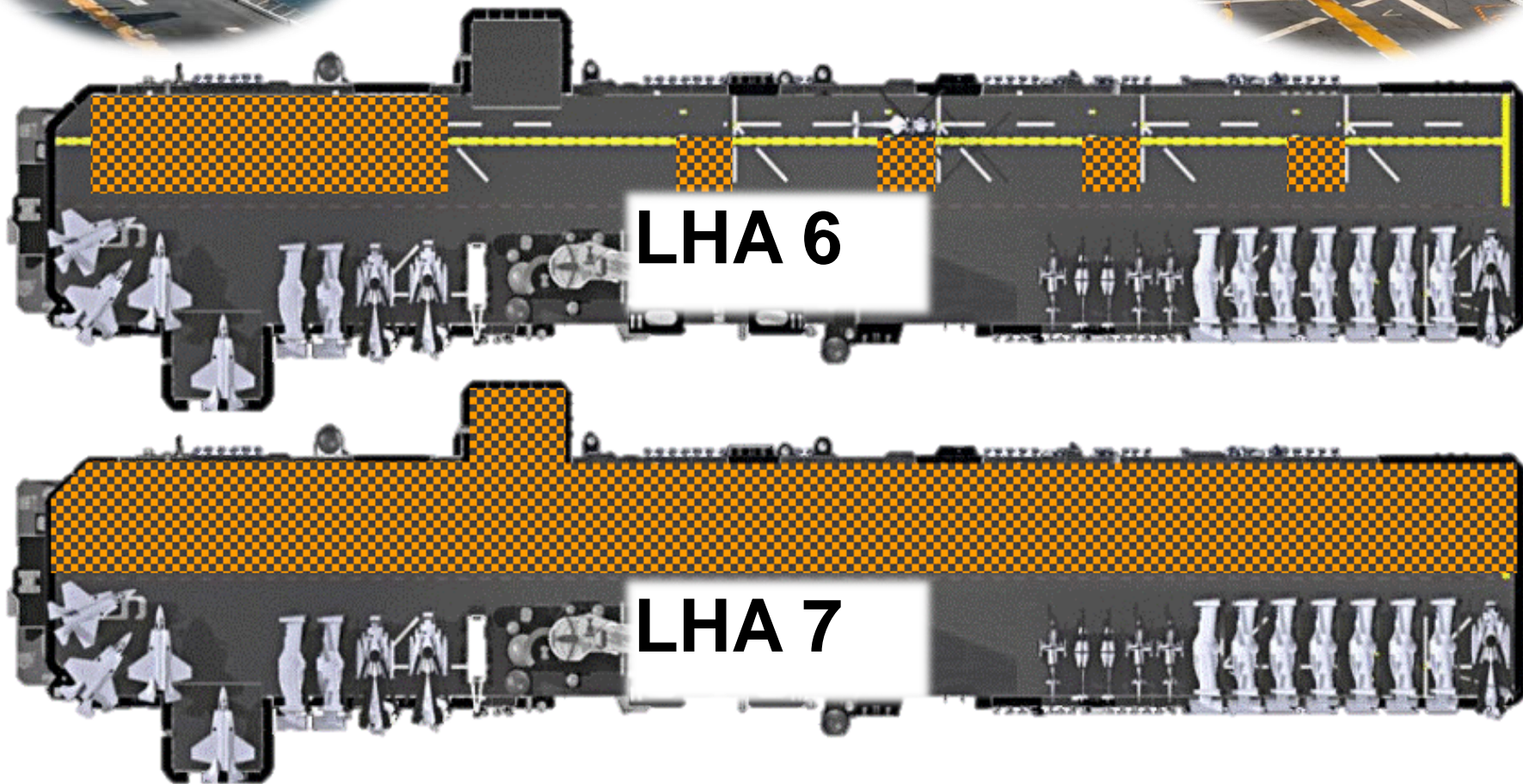
## External Environment Alterations

- Flt Deck Structure & Coatings
- Weapons Systems
- Antennas
- Peripheral Services & Systems



# Flight Deck TSN Application

highly tolerant  
temperature resistant  
***Thermal Spray Non-skid***  
coating





# Landing Craft





# LCUs vs. LCACs

## Across the Range of Military Operations



Frequency of event

LCAC 70%

LCU 17%

World's Shorelines Suitable for Landing is increased from 17 to 70 Percent



Theater Security Cooperation



Building Partnerships

Non Combat Evacuation Ops (NEOs)

Humanitarian Assistance  
Disaster Relief



Counterinsurgency



MCO/Exercises



LCU 1610 / 1700

LCAC / SSC



# LCU 1610

- 32 LCU 1610 craft in service; average age is **45 years old**
- The LCU 1610 *designed service life was only 25 years*



LCU 1617 built in 1959



*LCU 1617, is now  
56 years old*



LCU 1617 still serves today

- **Block system obsolescence**
- **Increasing maintenance costs**
- **Payload derated due to age/service life**
- **Corrosion repairs**

***2<sup>nd</sup> to the oldest...***



# *... the Oldest*



USS Constitution





# USS Constitution Corrosion

*Only 3,339 sheets of copper to go...*





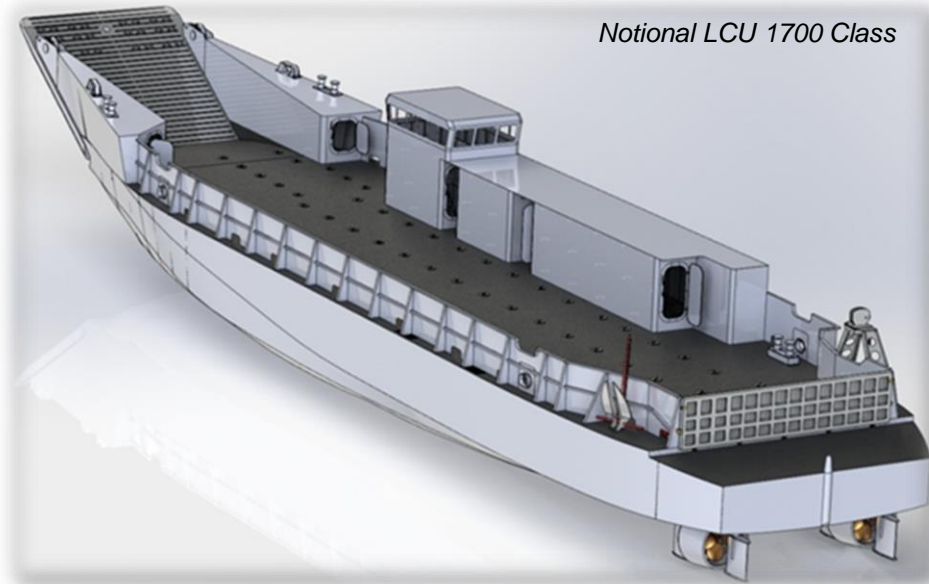
# LCU Corrosion





## Notional Capabilities

- Payload: up to 170 ST
- Personnel transport
- Range: 1,200 NM unrefueled
- Speed: 11 knots max, 8 knots endurance
- Independent operation capable up to 10 days



## Status

- Accelerated from FY18 to FY16 program start
- FBO Announcement forthcoming



# Personnel Transport Module

Personnel  
Transport  
Module

4 in FY16

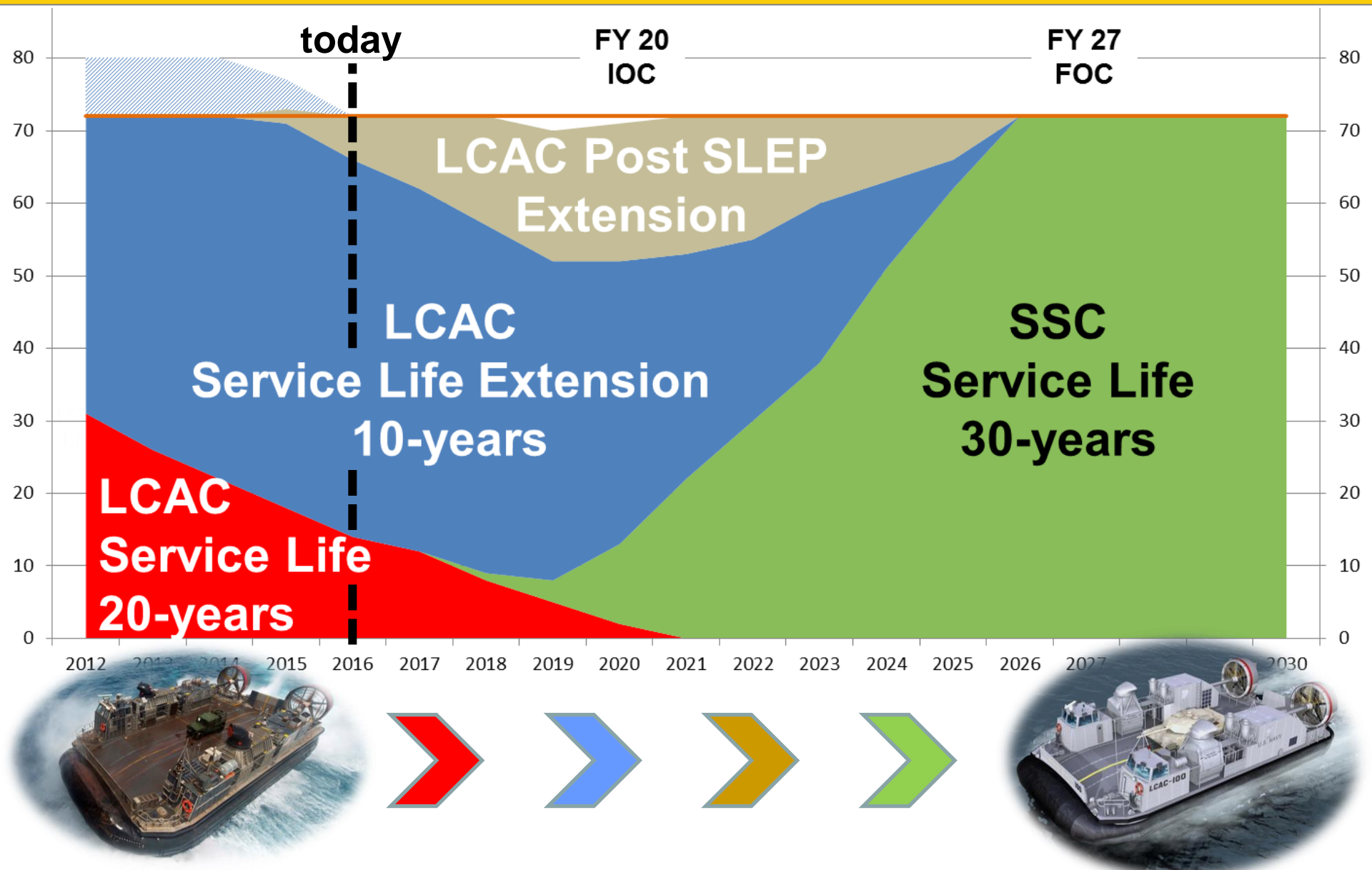


180 people | 144 troops | 54 litters





# LCAC / SSC Transition Plan





# SSC Design Characteristics

***More Lift + Lower Fuel Consumption + Less Maintenance***



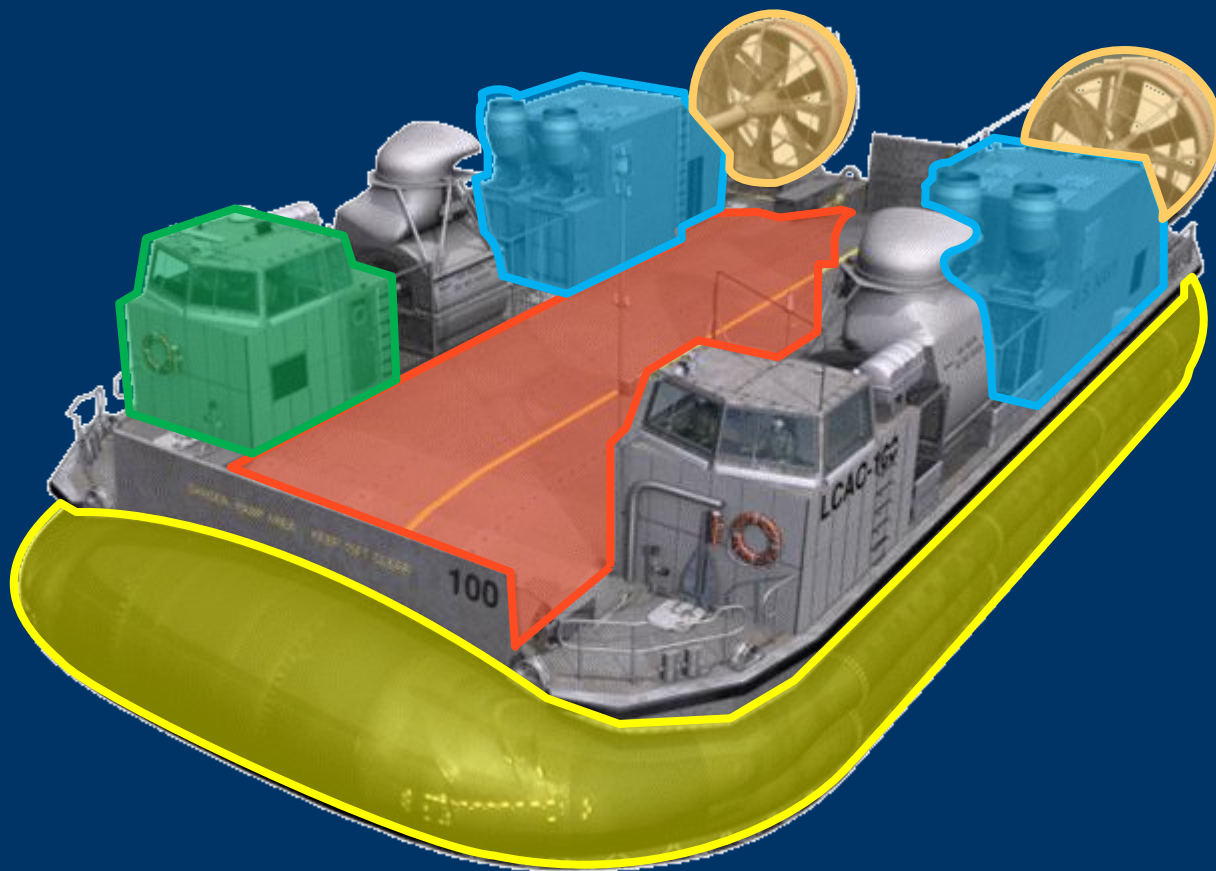
**Advanced Skirt**

**Cargo Deck Sized for M1-A1 Tank**

**Pilot / Co-pilot Arrangement**

**Fuel Efficient Engines**

**Efficient Propellers**





# SSC Production Update



Hull #	Progress
100	27%
101	16%
102	FY16 start
103	FY16 start





# QUESTIONS?

